## HULL: BACCHA

## SOME UNDESCRIBED SPECIES OF THE GENUS BACCHA FABRICIUS (DIPTERA: SYRPHIDAE)

BY FRANK M. HULL UNIVERSITY OF MISSISSIPPI

A study of miscellaneous Diptera from South America brings to light several new species of *Baccha* Fabricius, which are described here.

## Baccha hippolite, new species

Related to *Baccha vierecki* Curran. The wings, instead of being yellowish with the costal border brown throughout, are hyaline with a distinct but diffuse, smoky spot at the apex. The pterostigma is yellowish brown. Face tuberculate. Length 7 or 8 mm.

FEMALE. HEAD: The face, cheeks and front light yellow, the latter with a medial orange line and a small, distinct, black spot on the preantennal callus. Frontal and facial pile yellow. The antenna is entirely orange, the arista black except narrowly at the base. The vertex is brownish black, quite slender. The occiput is brassy black with greyish yellow pollen and golden pile except on the upper third, where it is black.

THORAX: The mesonotum is reddish brown with a light coppery reflection and a pair of yellowish pollinose vittae, which become evanescent before they reach the scutellum. The sides of the mesonotum, including the postalar callosity and humerus and a medial stripe that encircles the humerus are pale yellow. Scutellum yellow, very faintly brownish on the disc only when viewed obliquely. The mesonotal pile is yellow. Scutellar pile very sparse, fine and black. Ventral fringe composed of about 2 or 3 pairs of long, fine, black hairs. The pleuron is pale yellow with an oblique, dark, brown band which occupies nearly all of the metapleuron and hypopleuron and the metanotum but only touches the anterior edge of the posterior spiracle. Squamae and border are sepia, the halteres yellow with the knobs sepia.

LEGS: The anterior and middle legs are entirely pale yellow, the posterior fringe of the middle femur yellow. The hind femur is yellow with an unusually wide, sharply delimited, sepia, subapical annulus and with a slightly less dark, more diffuse basal band. Hind tibia yellow at the base and in the middle and with distinct subbasal and apical sepia bands. The hind tarsi are entirely pale brownish yellow.

WINGS: The wings are nearly hyaline, including the costal cell. The pterostigma is light yellowish brown, the apex of the wing with a distinct but diffuse, smoky brown spot covering the end of the marginal cell, be-

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ginning at the end of the first vein and extending downward throughout the end of the submarginal cell and below it. The costa is considerably drawn downward, the third vein very gently arched but almost straight. The alula is long and narrow, not wider than the basal section of the costal cell. Preanal spuria faint. Subapical crossvein sigmoid and short.

ABDOMEN: The abdomen is petiolate, sepia brown with yellow pattern; the brown portions past the middle of the third segment have slight violaceous reflections. The first segment is yellow, narrowly brown along the posterior margin, except on the sides. The second segment is subcylindrical with parallel sides except that near the anterior third the segment expands gently towards the base. This segment is brown, lighter and more translucent basally, narrowly and diffusely yellow in the anterior corners with a wide, distinct, slightly diagonal yellow band on either side meeting in the midline; it is indented anteriorly and posteriorly and narrowly bordered in front by opaque brown and more widely bordered behind. The third segment has similar, wider and more widely separated orange bands on either side lying in the middle of the segment, narrowly bordered with opaque brown. Fourth segment with a pair of distinct, inverted V-shaped, orange spots, widely separated and deeply cleft posteriorly; the anterior limb is a little narrowed, reaching the base and these spots are therefore more widely separated towards the base than at their posterior ends, which lie a little beyond the middle of the segment. The clefts are narrowly opaque and the middle of this segment is shining. Fifth segment with a pair of submedial, distinct, elongate, orange, vittate spots, which do not reach the posterior margin. They are more narrowly separated than the spots of the preceding segment. Pile of first segment yellow, of the remaining segments sepia brown to black.

Type. Female, Chanchamayo, Peru, August 19, 1948, J. Schunke collector. Paratype female, same locality, August 1, 1948. In the collection of the author.

## Baccha ulrica, new species

Related to *Baccha danaida* Hull. The yellow markings of the third abdominal segment are band-like, not triangular. Those of the fourth segment have a prominent, sublateral, posterior-ward, tail-like extension. Length 10.5 mm.

FEMALE. HEAD: The face and cheeks are yellow, the front yellow laterally with a broad, medial, somewhat diffuse, dark, brown stripe running from vertex to the posteriorly attenuate and acutely triangular shining black spot of the preantennal callus. The pile of the front is black and on the upper half of the face black. The remainder of the facial pile is yellow. The antenna is brownish orange, distinctly blackish from the arista to the apex of the segment. Arista narrowly yellowish at the base, the remainder blackish. Antennal pile black. The vertex is brassy black with dark, golden brown pollen and black pile lying in a single row. The occiput is Sept.-Dec., 1957]

brassy black with pale golden brown pollen and long, golden or reddish hairs, which are not scalous or flattened. The upper pile of the occiput is black.

THORAX: The mesonotum is golden brassy in reflection over the black ground color with a pair of wide and widely separated, pale reddish brown pollinose vittae, which do not reach the scutellum. The sides of the mesonotum including humerus and postalar callosity are broadly yellow. The scutellum is pale brownish yellow, somewhat darker brown in oblique view and contrasting with the sharp, declivitous base, which is yellow. Almost the entire mesopleuron, the upper sternopleuron and a large spot above the anterior coxa and on the anterior third of the pteropleuron are light yellow. The remainder of the pleuron is metallic black. Squamae brown with reddish brown fringe. Knob of halteres reddish brown. The pile of the mesonotum is fine and yellow, the scutellar pile longer and black, the ventral fringe consists of some 4 or 5 pairs of long, slender, blackish hairs.

LEGS: The anterior and middle legs are entirely yellow, the fringe of the latter yellow basally, brownish apically. The hind femur is yellow, widely dark sepia annulate preapically and narrowly brown at the base. The hind tibia is diffusely and widely but distinctly sepia annulate subbasally. The remainder of this tibia is yellowish but rendered darker by the black lateral and dorsal pile. Ventrally the golden pile of the hind tibia extends widely over the outer half and more linearly to the base. The hind tarsi are entirely yellow.

WINGS: The wings are tinged with light brown throughout, the pterostigma is sepia brown. Third vein gently arched, the costa considerably drawn backward. The subapical crossvein is deep sigmoid but only moderately long. The preanal spuria is distinct. The alula is narrow but apically barely wider than the width of the first section of the costal cell.

ABDOMEN: The abdomen is broad and spatulate and not greatly narrowed basally, dark sepia brown in color with a pale, yellowish brown pattern. The first segment is yellow, narrowly shining brown on the posterior margin, except laterally. The second segment has the sides plane or straight and the segment but little wider posteriorly. This segment is one and one-fourth times as long as its least width. It is brown, the lateral margin narrowly lighter in color with a rather wide, complete, slightly arched, brownish yellow fascia, which lies across the middle of the segment and is bordered anteriorly and posteriorly with opaque brown. The third segment is a little wider than long with a similar arched fascia in the middle, which is narrowly interrupted by brown in the middle. It also is rather widely bordered by opaque brown. The fourth segment has a pair of distinctly separated, elongate-oval, subbasal spots, which are slightly convergent posteriorly; from the anterolateral corners of each of these spots there is a slender, arched band of the same yellowish brown color, which turns backward but does not reach the lateral margin. These fourth segment spots are surrounded by opaque sepia and the posterior indentations are filled with opaque sepia. The fifth segment has a pair of submedial, medially rounded and posteriorly arched, acute, yellowish brown vittate spots, which basally extend outward towards the sides and which border the basal margin more

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narrowly near the lateral margins. These vittae do not reach the posterior margin and their posterior angles together with the area between are opaque. Sixth segment quite short. Anterior pile of the first segment reddish yellow, remainder of this pile and all of the other abdominal pile black. On the third and fourth segments the basal margin is very narrowly yellowish brown, except for a minute space in the middle on the fourth segment.

Type. Female, Chanchamayo, Peru, August 19, 1948; paratypes 2 females, June 8, 1948, same locality, collected by J. Schunke. In the collection of the author.

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